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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,215	07/07/2003	Francis Peterson	065640-0208	7070

22428 7590 09/20/2005

FOLEY AND LARDNER  
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3000 K STREET NW  
WASHINGTON, DC 20007

EXAMINER

GORMAN, DARREN W

ART UNIT PAPER NUMBER

3752

DATE MAILED: 09/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

C

<b>Office Action Summary</b>	<b>Application No.</b> 10/613,215	<b>Applicant(s)</b> PETERSON ET AL.	
	<b>Examiner</b> Darren W. Gorman	<b>Art Unit</b> 3752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 September 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 10-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 July 2003 and 01 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/31/03, 05/18/04, 09/16/04, 09/01/05</u> | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of Invention Group I in the reply filed on September 1, 2005 is acknowledged. The traversal is on the ground(s) that the different groupings of claims would not be unduly burdensome to search because much of the art is likely to overlap between the different groups of claims since all the groups of claims are related to a sprinkler. This is not found persuasive because in order to give full consideration of all the limitations of the recognized divergent subject matter between the identified distinct inventions, the Examiner would be required to perform an unduly burdensome search.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 10-17 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected Invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on September 1, 2005.

### ***Information Disclosure Statement***

3. The IDS forms filed on October 31, 2003, May 18, 2004, September 16, 2004 and September 1, 2005 are hereby acknowledged and have been placed of record. Please find attached a signed and initialed copy of each PTO 1449.

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*Drawings*

4. The replacement drawing sheet (7/7) showing Figures 12A-12C and 13, was received on September 1, 2005. This drawing sheet is acceptable.

*Claim Objections*

5. Claim 8 is objected to because of the following informalities: Claim 8 recites the proximate portion and the distal portion with respect to the housing, however a proximate portion and a distal portion of the housing have not been recited previously. Lending further confusion the this issue is the fact that claim 1 uses the terminology “distal” and “proximate” only when referring to the ends of the “hollow central portion” of the “body portion” of the sprinkler.

Appropriate correction is required.

*Claim Rejections - 35 USC § 102*

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-4, 8 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by

Anderson, USPN 4,066,129.

Anderson shows a sprinkler comprising: a body portion (1) having a substantially hollow central portion (within 4), the hollow central portion extending from a distal end to a proximate

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end; and a housing (20) removably connected to (by screws 21) and integral with the sprinkler, the housing comprising: at least one outer wall (outer circumferential wall of 20), and a cover portion (top portion of 20) transverse with the at least one outer wall which defines an interior space, wherein the sprinkler is at least partially enclosed within the interior space (see Figures 1-4). Anderson also shows the housing further comprising a lip (no reference number – see bottom portion of 20) outwardly extending from a distal portion of the outer wall (see Figures 1-4). Further, Anderson shows the at least one outer wall defining at least one opening (26) having a first face (29), a second face (30) and an engagement portion (32) adjacent the first face (see Figures 1 and 3). Still further, Anderson shows the housing being circular and having a distal portion and a proximate portion, the circumference of the proximate portion appearing to be equal to the circumference of the distal portion (see Figures 1-4).

### *Claim Rejections - 35 USC § 103*

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson.

Anderson shows all of the claimed structural limitations as recited in claim 1, and Anderson also shows the device further comprising: a diffuser head portion (17) located in the vicinity of the distal end of the hollow central portion; a sealing member (12) in proximity to the hollow central portion; and a thermally sensitive link portion (8). However, Anderson states that

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the sealing member may be a polymeric or soft metal disc (see column 3, lines 10-15), rather than expressly disclosing the sealing member as being made of an elastomeric material.

It is old and well known to form a fire sprinkler head sealing member from an elastomeric material such that a reliable seal is formed for preventing water flow when the sprinkler is not activated, and such that the seal will reliably deflect from its sealing position when the thermally responsive element is activated in a fire emergency.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to replace the sealing member shown by Anderson, with a sealing member made from an elastomeric material, such that a reliable seal is formed for preventing water flow when the sprinkler is not activated, and such that the seal will reliably deflect from its sealing position when the thermally responsive link is activated in a fire emergency.

10. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson, in view of Curless, USPN 6,209,654 and Elder, USPN 6,484,809.

Anderson shows all of the claimed structural limitations as recited in claim 1, however Anderson does not expressly disclose the sprinkler and housing as being made from injection-molded plastic.

Curless teaches manufacturing overhead mounted fire sprinklers (1) by using injection-molded plastic, which is less expensive than other conventional materials (see column 5, lines 27-29).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to manufacture the sprinkler shown by Anderson using injection-molded

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plastic, as taught by Curless, since injection-molded plastic is less expensive than other conventional materials.

Elder teaches a fire sprinkler housing (12) having an outer wall (50) which defines an interior space, wherein an overhead mounted fire sprinkler (18) is at least partially located within the interior space (see Figure 4), the housing being manufactured by using injection-molded plastics, which are available in numerous colors, shades and textures which can cosmetically match a ceiling where the sprinkler housing is mounted, such that a painting process is not required, thereby reducing costs associated with manufacturing the housing (see column 3, lines 36-51).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to manufacture the housing shown by Anderson using injection-molded plastic, as taught by Elder, since injection-molded plastics are available in numerous colors, shades and textures which can cosmetically match a ceiling where the sprinkler housing is mounted, such that a painting process is not required, thereby reducing costs associated with manufacturing the housing.

### *Conclusion*

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Anderson, Johnson, Byrne, Fischer et al. and Galaszewski are cited as of interest.

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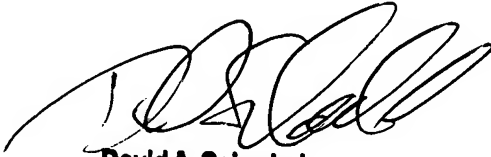
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Darren W. Gorman whose telephone number is 571-272-4901. The examiner can normally be reached on M-F 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Scherbel can be reached on 571-272-4919. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Darren W Gorman  
Examiner  
Art Unit 3752

*DWG 9/15/05*  
DWG  
September 15, 2005

  
**David A. Scherbel**  
**Supervisory Patent Examiner**  
**Group 3700**